

ABSTRACT

The invention relates to a device for detecting chemical species present in a condensed medium, comprising means for determining the wavelength and the intensity values which are characteristic of electromagnetic transmission signals which are backscattered in response to a plurality of electromagnetic excitations, which have distinct wavelengths, of at least one chemical species which can be contained in the condensed medium; laser means producing a beam in order to excite the condensed medium; means for recording the wavelengths and the intensity values of backscattered electromagnetic transmission signals; and comparing and determining means for comparing the recorded intensity value of the electromagnetic signal, which is backscattered by the medium at a determined characteristic intensity value, with at least one corresponding transmission wavelength and excitation wave length.